NASA Educational Technology Services
Administered by Marshall IT Services (MITS)
Type of Agreement (Contract)
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PROJECT DESCRIPTION

NASA Educational Technology Services (NETS) is a cross-cutting NASA education technology project that prepares and delivers educational content on the NASA Portal (www.nasa.gov), and maintains the Office of Education website (education.nasa.gov). Additional Web support is provided by identification and linkage of multimedia resources to support video programming on the NASA TV Education File and Education Services channel and for selected projects needing website creation and support. NETS assists education projects in complying with the agency mandate to migrate all Web content to a portal infrastructure. NETS provides Web-based support to NASA's Office of Education external partnerships (Space Act Agreements) and cooperative agreements, and conducts customer focus and usability studies to determine improved methods to deliver electronic content to NASA's key education audience.

PROJECT GOALS

- Content identification and creation for the education sections of the NASA Portal (www.nasa.gov). The team identifies potential content based on current NASA mission directorate or education projects, activities, or events. The team assesses the educational value of the content, converts it to the appropriate grade level, and ensures that it meets Portal standards.
- Development of games and interactive features for NASA Kids' Club, ensuring that the games contain educational value and are appropriate for their grade-level audience.
- Publication and syndication of NASA Portal educational content.
- New website development for other NASA Education projects and activities.
- Work with the NASA mission directorate education leads, NASA Education project managers, and activity sponsors to create or promote NASA e-

- learning content and educational opportunities. The team also collaborates with external partners to inspire student interest in science, technology, engineering, and mathematics (STEM) content.
- Provide support for activities such as usability studies, education product cross-promotion, and education conference exhibits to ensure that NASA educational content is reaching its audience as effectively as possible.

PROJECT BENEFIT TO OUTCOMES 6.1, 6.2, AND 6.4

Outcome 6.1: Improve retention of students in STEM disciplines by providing opportunities and activities along the education pipeline.

Outcome 6.2: Promote STEM literacy through strategic partnerships with formal and informal organizations.

Outcome 6.4: Inform, engage and inspire the public by sharing NASA's missions, challenges, and results.

NETS provides infrastructure support for these outcomes. Specifically:

NETS supports NASA Education efforts to accomplish Outcome 6.1 by providing accessibility to and availability of NASA's educational materials and articles in the education sections of NASA.gov, by disseminating information on NASA Education opportunities and activities via the EXPRESS Listserv and by developing, publishing, and maintaining educational content to improve the impact of NASA's STEM education efforts by making NASA's materials and resources available to Web users worldwide.

Efforts to accomplish Outcome 6.2 include maintaining various NASA Education websites with relevant, timely quality content; working with internal/external partners to promote electronic professional development webinars and professional development workshops via the EXPRESS Listserv and on NASA.gov; maintaining a Materials Finder so that educators may find standards-based educational and curricular-support materials and activities easily; and collaborating with partners who wish to use NASA educational materials or website resources.

NETS' support towards accomplishing Outcome 6.4 includes promoting NASA events and educational activities at museums and science centers nationwide, by collaborating with partners to develop and post features on NASA Education activities and projects, and by producing and maintaining educational content on NASA's missions and challenges on NASA.gov.

PROJECT ACCOMPLISHMENTS (CONNECTION BACK TO ANNUAL PERFORMANCE GOALS AND PLANS)

- Added 66 educational products to, modified 35 products in, and deleted 50 outdated products from NASA.gov, which currently houses more than 2,000 educational materials and resources in the Materials Finder. (APG 6.2.1.1: ED-12-7)
- Sent 27 EXPRESS messages promoting opportunities and activities for museums and science centers. (APG 6.4.1.1: ED-12-9)
- Sent 143 EXPRESS messages promoting professional development opportunities, resources, and activities for educators. (APG 6.2.1.1: ED-12-7)
- Sent 158 EXPRESS messages promoting educational resources, activities, and opportunities for elementary and secondary students. (APG 6.1.2.2: ED-12-6)
- Sent 85 EXPRESS messages to promote opportunities for undergraduate and graduate students to participate in NASA education activities. (APG 6.1.2.1: EDU-12-4)
- Sent 73 EXPRESS messages promoting opportunities for educators to participate in NASA education programs. (APG 6.1.1.1: EDU-12-3)
- Posted nine features to encourage educators to participate in NASA education programs. (APG 6.1.1.1: EDU-12-3)
- Posted five features to encourage undergraduate and graduate students to participate in NASA education opportunities. (APG 6.1.2.1: EDU-12-4)
- Posted 31 features to encourage elementary and secondary students to participate in NASA instructional and enrichment activities. (APG 6.1.2.2: ED-12-6)
- Posted five features to contribute to educators' use of NASA resources in their curricula. (APG 6.2.1.1: ED-12-7)
- Leveraged social media resources to disseminate messages to more than 2.9 million users. (APG 6.1.1.1)
- Produced, published, and maintained seven new education websites. (APG 6.1.1.1)
- Produced and published four new Do-It-Yourself podcast modules and 20 blog posts to encourage teachers to use technology and STEM-based content in the classroom. (APG 6.1.1.1)
- Supported 23 chats for NASA Explorer Schools. (APG 6.1.1.1: ED-12-3)
- Produced and published four mission features, six image sets, and the Windows to Earth interactive feature on NASA Kids' Club. (APG 6.1.2.2: ED-12-5)
- Maintained the NASA Students Facebook page, increasing the user community to more than 7,600 participants. (APG 6.1.2.1: ED-12-4)
- Moderated 2,838 emails and 2,717 comments during this fiscal year. (APG 6.4.1.1)

Notes:

The NETS Team was awarded NASA's Space Flight Awareness Team Award for support in promoting educational materials and projects related to space flight to educators, students, and the general public. (October 2011)

The NASA.gov website has won *The 2012 Webby Award* and the *2012 People's Voice Webby Award* for the best government website. *The Webby Award* is the highest international award honoring excellence on the Internet and is presented by The International Academy of Digital Arts and Sciences. The Academy presents two honors in every category: *The Webby Award* and *The Webby People's Voice Award*. Members of the Academy select the nominees for both awards in each category, as well as the winner of *The Webby Award* for each category. The online voting community determines the winner of *The People's Voice* by voting for the nominated work that they believe to be the best in each category. This is the fourth consecutive and fifth time overall that NASA.gov has won the *People's Webby Award*, and the first time that the website has won *The Webby Award*. The NETS team creates and maintains the NASA Office of Education, NASA Kids' Club, For Educators, and For Students sections on the NASA.gov website.

The NASA.gov website was chosen as one of the "50 Best Websites 2012" from *Time* magazine. Each year, *Time* salutes sites and services that keep audiences entertained and informed. NASA.gov was touted for its Curiosity videos as well as information, photos, and videos on mission research. Additionally, NASA Kids' Club received mention in a "special section for kids."

NASA Kids' Club was recognized as a 2012 Best Website for Teaching and Learning by the American Association of School Librarians (AASL) in the Curriculum Collaboration category. (June 2012)

PROJECT CONTRIBUTIONS TO PART MEASURES

NETS prepares and delivers audience-appropriate educational content for K-12 and high education educators and students through NASA.gov, and the NASA Education home page. Promotional efforts by NETS for agency education and mission directorate projects help leverage funding and resources, providing projects with direct student and educator interaction objectives with electronic information and distribution support. The Project Accomplishments listed above provide details on this support to the Office of Education and mission directorate's projects and activities, which contribute to the accomplishment of the measures listed below.

- APG 6.1.1.1: EDU-12-3 (35,000 educators participate in NASA education programs)
- APG 6.1.2.1: EDU-12-4 (20,000 undergraduate and graduate students participate in NASA education opportunities)
- APG 6.1.2.2: ED-12-6 (200,000 elementary and secondary students participate in NASA instructional and enrichment activities)
- APG 6.2.1.1: ED-12-7 (50 percent of educators NASA resources in their curricula after participating in NASA professional development as measured by survey responses)
- APG 6.4.1.1: ED-12-9 (420 museums and science centers across the country actively engage the public in major NASA events)

IMPROVEMENTS (e.g., project management, efficiencies, etc.) MADE IN THE PAST YEAR

- Implemented new "blinds" format in the For Students and For Educators sections of NASA.gov to allow for larger images and a better presentation on the Web pages.
- Increased use of social media outlets to broaden the reach of messages to users.
- Completed a team total of 127.5 hours of training as a team to garner skills and knowledge to better support customers.
- Created an internal procedure used to identify and request time from NASA subject matter experts.
- Created project coordinator and project implementation lead roles to provide a more defined structure during project management tasks and to deliver better support to customers.
- Refined the process of creating Do-It-Yourself (DIY) Podcasts by leveraging tools and services from the Marshall Space Flight Center Audio Visual Information Services group.
- Created an internal process to review feature story requests for the Education areas of the NASA website.
- Encouraged the cross training of employees in order to provide depth in all functional areas.

PROJECT PARTNERS AND ROLE OF PARTNERS IN PROJECT EXECUTION

• Collaborated with and supported the Teaching From Space team on new websites, including Space Life Sciences, STEM on Station, Teach Station,

Microgravity Education, Airborne Research Experiences for Educators and Students (AREES), and an Exploration Design Challenge to come FY13. NASA partnered with Lockheed Martin and National Institute of Aerospace (NIA).

- Collaborated with the Interdisciplinary National Science Project Incorporating Research and Education team to produce a feature article for NASA.gov.
- Collaborated with the Women@NASA group and George Washington University to promote the Women's History Month Event: Women, Innovation and Aerospace.
- Collaborated with the National Center for Earth and Space Science Education to promote the Student Space Flight Experiments Program with feature stories in the education areas of NASA.gov.
- Collaborated with the National Air and Space Museum to promote assorted NASA and space related events.
- Collaborated with the World Space Week organization to promote World Space Week.
- Collaborated with the National Education Association's NEA Foundation to promote the Challenge to Innovate, or C2i: Gaming Challenge.
- Collaborated with the Department of Defense to promote the 2012 Army-Navy Bridge Design Contest.
- Collaborated with the National Institutes of Health to promote curriculum materials and student challenges.
- Collaborated with the National Science Foundation to promote the annual Presidential Awards for Excellence in Mathematics and Science Teaching program.
- Collaborated with the Astronaut Memorial Foundation to promote their annual educator award.
- Collaborated with the Department of Education to promote STEM-related opportunities available to educators.